

How PIDs Demonstrate Identity

And why that's better for research integrity than verification

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ORCID

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Co-funded by
the European Union



Demonstrating identity can help repair and uphold trust in the scholarly record

1. Why is there a crisis in research integrity?
2. ORCID's commitment to upholding research integrity
3. How Trust Markers in ORCID records help demonstrate identity
4. Together, ORCID's Members form our Community Trust Network
5. Trust Markers in action — use cases from the community
6. Participative Discussion and Q&A

The Research Integrity Crisis

The integrity of the scholarly record is in question

| C | O | P | E |

nature

The
Guardian

"The publishing world is faced with a large and problematic pollution of the publication record with false and inaccurate research, risking public trust in research, introducing dangers to public health and medicine, and undermining the research process. Many of these papers originate from third party commercial agencies offering services to authors ("paper mills") for the creation of fake or manipulated data and articles."

COPE position statement, 19 Jan 2024

"Estimates suggest that hundreds of thousands of paper-mill publications are polluting the scientific literature. Paper mills often sell authorships on bogus papers to researchers trying to pad their CVs. One analysis indicates that some 2% of all scientific papers published in 2022 resembled paper-mill productions."

How big is science's fake-paper problem?
Richard Van Noorden, 6 Nov 2023

"Tens of thousands of bogus research papers are being published in journals in an international scandal that is worsening every year, scientists have warned. Medical research is being compromised, drug development hindered and promising academic research jeopardised thanks to a global wave of sham science that is sweeping laboratories and universities."

The situation has become appalling, Robin McKie, 3 Feb 2024

Multiple factors are driving the crisis



Rising pressures on researchers to “**publish or perish**”, with career advancement dependent on peer reviewed publication and citations



Publishers **focused** on shifts in **business model** through the Open Access transition

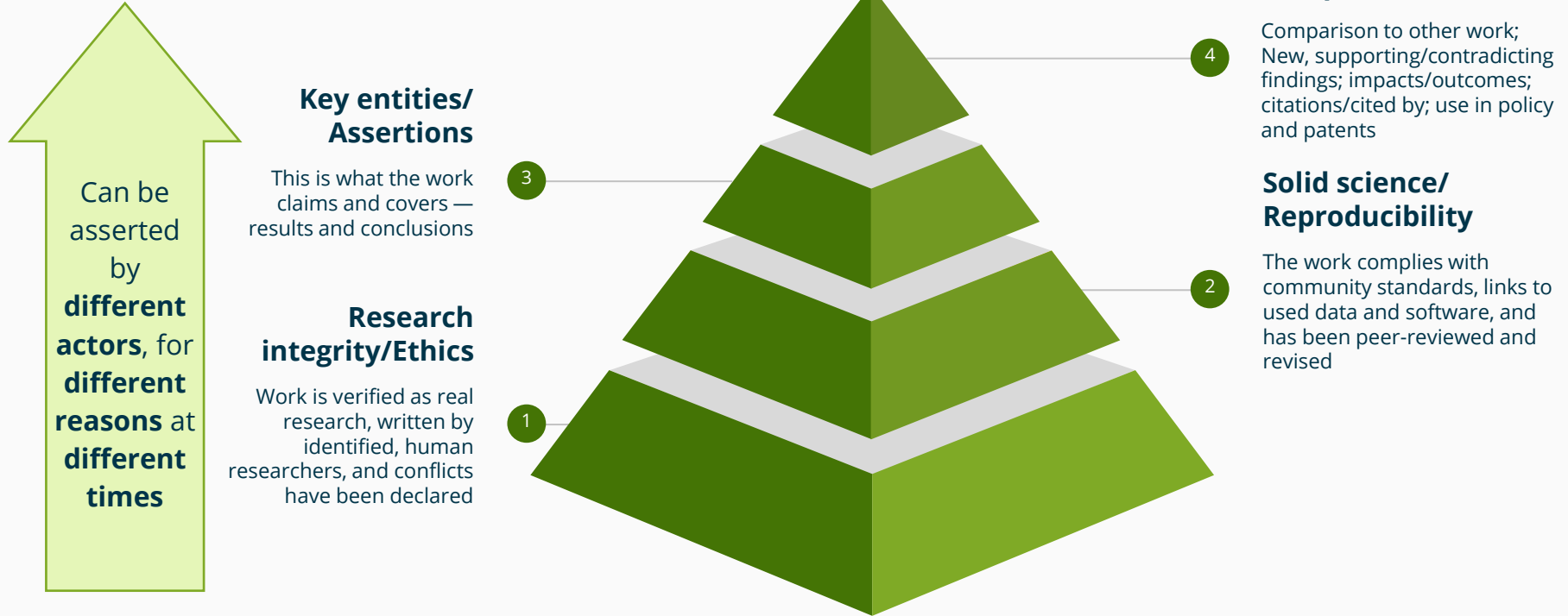


New business models that risk incentivizing publication **volume** and **speed** over **quality**, including the rise of special issues

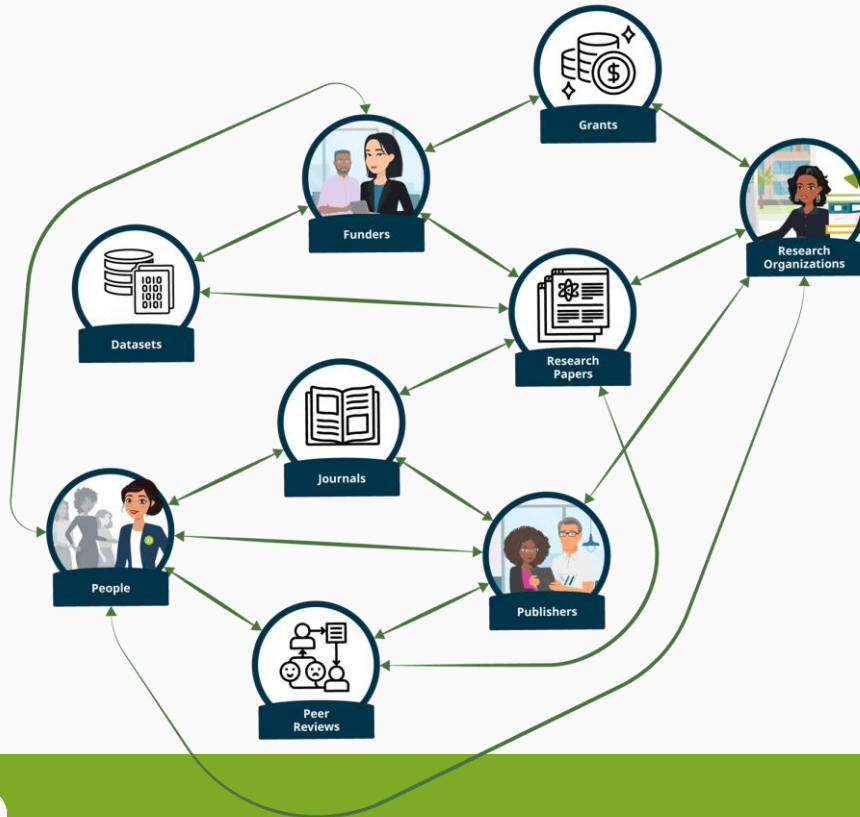


Lightning-fast uptake of **generative AI tools** reducing the effort to create plausible “fake” research

A multi-layered community-wide approach is needed to verify research: the “Pyramid of Trust”



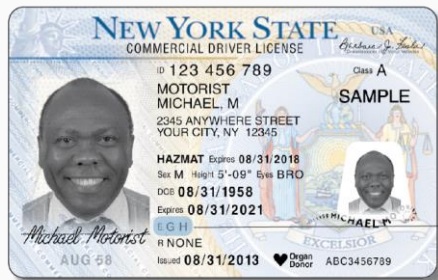
PIDs such as ORCID IDs are essential to tracking and analyzing the key relationships between the entities of research



- The **track record** of researchers can be considered through **previous works**, **peer reviews** and **funding awards**
- **Affiliations** between researchers and their institutions and be **validated**
- Networks of **bad actors** can be **visualized** and **analyzed**:
 - Paper Mills
 - Citation rings
 - Corrupt editors/guest editors/editorial boards

We believe identity validation is part of the solution, but what is actually helpful and appropriate for our use cases?

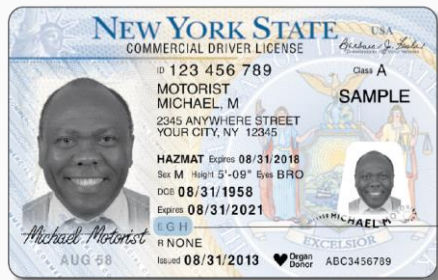
Traditional government ID:



- Validated legal name
- Validated home address
- Validated date of birth
- Physical appearance

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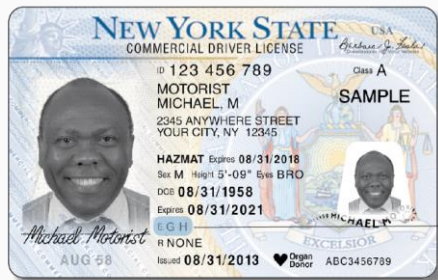
Traditional government ID:



- X Useful if you want to sue the researcher, but not for much else
- X Intrusive from a privacy point of view
- X Difficult to apply consistently around in all countries

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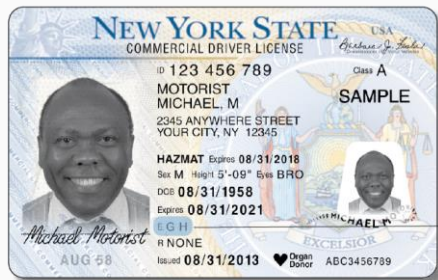
Scholarly bona-fides:



- Validated academic affiliation
- Validated educational record
- Validated funding awards
- Validated previously published works

We believe identity validation is part of the solution, but what is actually helpful and appropriate for our use cases?

Traditional government ID:



- X Useful if you want to sue the researcher, but not for much else
- X Intrusive from a privacy point of view
- X Difficult to apply consistently around in all countries

Scholarly bona-fides:



- ✓ Likely strong correlation with genuine researchers
- ✓ Information that researchers generally make public on their profiles
- ✓ Universally used around the world

ORCID's Commitment to Trust

The ability to uniquely identify researchers is critical to a trustworthy scholarly record

What's in a name?

Most names are not unique



Individuals and organizations can use different alphabets, abbreviations, or naming conventions.



Many people have the same or similar name, and names may change through marriage or other circumstances.

People use different versions of their names during their career.

RESEARCH ARTICLE

Peta-electron volt gamma-ray emission from the Crab Nebula

The LHAASO Collaboration*,†, Zhen Cao, F. Aharonian, Q. An, Axikegu, L. X. Bai, Y. X. Bai, Y. W. Bao, D. Bastieri, X. J. Bi, Y. J. Bi, H. Cai, J. T. Cai, Zhe Cao, J. Chang, J. F. Chang, B. M. Chen, E. S. Chen, J. Chen, Liang Chen, Liang Chen, Long Chen, M. J. Chen, M. L. Chen, Q. H. Chen, S. H. Chen, S. Z. Chen, T. L. Chen, X. L. Chen, Y. Chen, N. Cheng, Y. D. Cheng, S. W. Cui, X. H. Cui, Y. D. Cui, B. D'Ettorre Piazzoli, B. Z. Dai, H. L. Dai, Z. G. Dai, Danzengluobu, D. della Volpe, X. J. Dong, K. K. Duan, J. H. Fan, Y. Z. Fan, Z. X. Fan, J. Fang, K. Fang, C. F. Feng, L. Feng, S. H. Feng, Y. L. Feng, B. Gao, C. D. Gao, L. Q. Gao, Q. Gao, W. Gao, M. Ge, L. S. Geng, G. H. Gong, Q. B. Gou, M. H. Gu, F. L. Guo, J. G. Guo, X. L. Guo, Y. Q. Guo, Y. Y. Guo, Y. A. Han, H. He, H. N. He, J. C. He, S. L. He, X. B. He, Y. He, M. Heller, J. K. Hor, C. Hou, X. Hou, H. B. Hu, S. Hu, S. C. Hu, X. J. Hu, D. H. Huang, Q. L. Huang, W. H. Huang, X. T. Huang, X. Y. Huang, Z. C. Huang, F. Ji, X. L. Ji, H. Y. Jia, K. Jiang, Z. J. Jiang, C. Jin, T. Ke, D. Kuleshov, K. Levochkin, B. B. Li, Cheng Li, Cong Li, F. Li, H. B. Li, H. C. Li, H. Y. Li, Jian Li, Jie Li, K. Li, W. L. Li, X. R. Li, Xin Li, Xin Li, Y. Li, Y. Z. Li, Zhe Li, Zhuo Li, E. W. Liang, Y. F. Liang, S. J. Lin, B. Liu, C. Liu, D. Liu, H. Liu, H. D. Liu, J. Liu, J. L. Liu, J. S. Liu, J. Y. Liu, M. Y. Liu, R. Y. Liu, S. M. Liu, W. Liu, Y. Liu, Y. N. Liu, Z. X. Liu, W. J. Long, R. Lu, H. K. Lu, B. Q. Ma, L. L. Ma, X. H. Ma, J. R. Mao, A. Masood, Z. Min, W. Mitthumsiri, T. Montaruli, Y. C. Nan, B. Y. Pang, P. Pattarakijwanich, Z. Y. Pei, M. Y. Qi, Y. Q. Qi, B. Q. Qiao, J. J. Qin, D. Ruffolo, V. Ruffolo, A. Saiz, L. Shao, O. Shchegolev, X. D. Sheng, J. Y. Shi, H. C. Song, Yu. V. Stenkin, V. Stepanov, Y. Su, Q. N. Sun, X. H. Sun, Z. B. Sun, P. H. T. Tam, Z. B. Tang, W. W. Tian, B. D. Wang, C. Wang, H. Wang, H. G. Wang, J. C. Wang, J. S. Wang, L. P. Wang, L. Y. Wang, R. N. Wang, Wei Wang, Wei Wang, X. G. Wang, X. J. Wang, X. Y. Wang, Y. Wang, Y. D. Wang, Y. J. Wang, Y. P. Wang, Z. H. Wang, Z. X. Wang, Zhen Wang, Zheng Wang, D. M. Wei, J. J. Wei, Y. J. Wei, T. Wen, C. Y. Wu, H. R. Wu, S. Wu, W. X. Wu, X. F. Wu, S. Q. Xi, J. Xia, J. J. Xia, G. M. Xiao, D. X. Xiao, G. Xiao, H. B. Xiao, G. G. Xin, Y. L. Xin, Y. Xing, D. L. Xu, R. X. Xu, L. Xue, D. H. Yan, J. Z. Yan, C. W. Yang, F. F. Yang, J. Y. Yang, L. L. Yang, M. J. Yang, R. Z. Yang, S. B. Yang, Y. H. Yao, Z. G. Yao, Y. M. Ye, L. Q. Yin, N. Yin, X. H. You, Z. Y. You, Y. H. Yu, Q. Yuan, H. D. Zeng, T. X. Zeng, W. Zeng, Z. K. Zeng, M. Zha, X. X. Zhai, B. B. Zhang, H. M. Zhang, H. Y. Zhang, J. L. Zhang, J. W. Zhang, L. X. Zhang, Li Zhang, Lu Zhang, P. F. Zhang, P. P. Zhang, R. Zhang, S. R. Zhang, S. S. Zhang, X. Zhang, X. P. Zhang, Y. F. Zhang, Y. L. Zhang, Yi Zhang, Yong Zhang, B. Zhao, J. Zhao, L. Zhao, L. Z. Zhao, S. P. Zhao, F. Zheng, Y. Zheng, B. Zhou, H. Zhou, J. N. Zhou, P. Zhou, R. Zhou, X. X. Zhou, C. G. Zhu, F. R. Zhu, H. Zhu, K. J. Zhu, X. Zhu

8 | Virology | Research Article | 06 June 2022

f t in

Trivalent NDV-HXP-S Vaccine Protects against Phylogenetically Distant SARS-CoV-2 Variants of Concern in Mice

Authors: Irene González-Domínguez, Jose Luis Martínez, Stefan Slamanig, Nicholas Lemus, Yonghong Liu, Tsoi Ying Lai, Juan Manuel Carreño, Gagandeep Singh, Gagandeep Singh, Michael Schotsaert, Ignacio Mena, Stephen McCroskery, Lynda Coughlan, Florian Sommer, Adolfo García-Sastre, Peter Palese, Weina Sun

SHOW FEWER | AUTHORS INFO & AFFILIATIONS

ORCID was built from the ground up to earn the broadest possible trust of the communities we serve

- Legal incorporation as US non-profit entity
- Membership organization open to all
- Governed by board elected by our members
- Legally binding membership agreements
- Privacy policy regulated by GDPR and other national regulations
- Legally binding employment agreements, code of conduct, etc.



**Legal
Constructs**



**Social
Constructs**

- Founding principles and values
- Commitment to researcher control
- Open source software and [FAIR open data](#)
- Equitable, sustainable business model
- Holding ourselves accountable by working openly
- Continuous community engagement and dialogue



We aim to balance researcher control and data quality



Researcher control

Researchers ...

- Own their own records
- Control who accesses their information
- May change access preferences *at any time*

Organizations may only add information to ORCID records with the researcher's permission, and may only update or delete information that was added by them



Data quality

- Terms of use prevent misrepresentation
- False data in records may be disputed by anyone in the community
- Machine-learning algorithm detects obvious spam
- Disputed and spam records are removed from use, pending correction or withdrawal

Trust in an ORCID record accumulates over time as reliable and trustworthy data sources add information (with the record holder's permission)



Researchers are in full control of their ORCID records

Data can only be added by the **record holder** themselves...

Thor: Conceptual Model Of Persistent Identifier Linking

2016-03-31 | Report

DOI: [10.5281/ZENODO.48705](https://doi.org/10.5281/ZENODO.48705)

Funded by GRANT_NUMBER: [H2020-EU.1.4.1.3](#)

[Show more detail](#)

Source:  Sofia Maria Hernandez Garcia

...or, by an ORCID **member organization**, with the **record holder's permission**

ORCID Annual Public Data File, 2013

2013 | Data set

DOI: [10.14454/07243.2013.001](https://doi.org/10.14454/07243.2013.001)

[Show more detail](#)

Source:  DataCite

Fine-grained privacy controls let researchers control the visibility of each item in their record

Who can see this?



Everyone



Trusted parties



Only me

[More information on visibility settings](#)

ORCID is committed to helping address the research integrity crisis

The COPE & STM Paper Mills Research report recommended “Continued investment in **tools** and **systems** to detect potential paper mill manuscripts at submission, with consistent and shared guidance in the use of these tools”

Putting things into action:

1. ORCID is a signatory to the [United2Act Consensus Statement](#) — ORCID is closely involved in workstream 4: “**Enable the development of trust markers**”
2. ORCID is collaborating closely with STM Solutions **Integrity Hub** and **Research Identification** working groups
3. We are recommending the use of **ORCID Record Summaries** and **trust markers** in **editorial workflows** with publishers and vendors



ORCID Trust Markers help demonstrate identity

Researchers use ORCID in a variety of ways

For example, when submitting a manuscript or grant application, researchers may:

- Sign into the submission system using their ORCID iD
- Have their submission form pre-filled based on their ORCID record
- Have their ORCID iD and their collaborators ORCID iDs included in the work metadata
- Have their ORCID record automatically updated with the work once published

Editors might:



Review ORCID records to help with research integrity checks

Reviewers might

- Sign into the submission system using their ORCID iD
- Get credit for review work by having peer review activity added to their ORCID record

Information on ORCID records can help with decision making

- Affiliations
- Professional activities
- Funding information
- Publications
- Other outputs
- Peer reviews
- Website URLs

The screenshot displays an ORCID iD profile for Sofia Maria Hernandez Garcia. The profile includes a header with the ORCID logo and the URL <https://orcid.org/0000-0001-5727-2427>. Below the header, there are sections for Emails (s.garcia@orcid.org), Websites & social links (Faculty profile webpage), Other IDs (Profile system identifier: A-123456, ResearcherID: L-8716-2018, eScientist: 0000-0001-5727-2427), and Countries (United States). The main content area is titled 'Biography' and contains a note: 'Sofia Maria Hernandez Garcia is used for testing and demonstrating ORCID records.' Below the biography, there is a section for 'Activities' with a list of categories: Employment (2), Education and qualifications (4), Invited positions and distinctions (3), Membership and service (2), Funding (1), Research resources (2), Works (7), and Peer review (2). Each category has a 'Sort' button. A 'Printable version' link is located in the top right corner.

Is this you? [Sign in to start editing](#) Printable version

Published name
Sofia Maria Hernandez Garcia

Name
Sofia Garcia

Also known as
S. M. Garcia, Sofia Maria Garcia

Biography
Sofia Maria Hernandez Garcia is used for testing and demonstrating ORCID records.

Activities Expand all

- > Employment (2) Sort
- > Education and qualifications (4) Sort
- > Invited positions and distinctions (3) Sort
- > Membership and service (2) Sort
- > Funding (1) Sort
- > Research resources (2) Sort
- > Works (7) Sort
- > Peer review (2) Sort

Validated information is even more useful

When an ORCID member updates an ORCID record, the source (provenance) of that update is captured for re-use:

- **Research organizations** add **affiliations**
- **Publishers** add **outputs** and **reviews**
- **Funders** add **funding awards**



These provide **‘trust markers’** that can be used to help in decision making.



Impactful research output

2023 | Article
DOI: 10.14454/07243.2013.001

Source:  Manuscript Submission System X



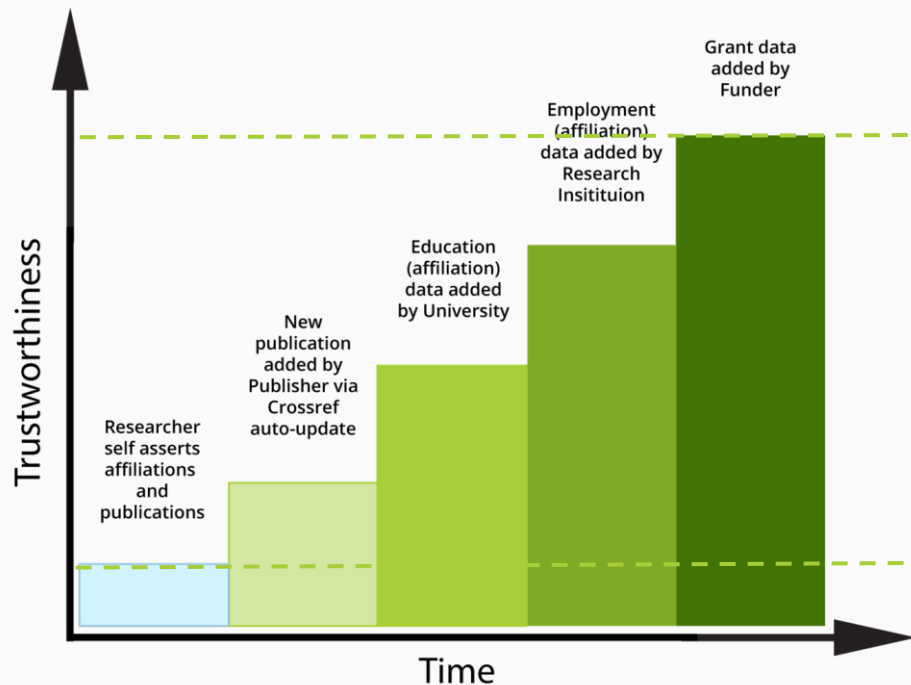
▼ Review activity for **Journal Y** (1)

Journal, Journal Y
ISSN: [1532-1827](#)

Review date: 2020-11-16 Type: Review Role: Reviewer

Source:  Manuscript Submission System X

Our community driven trust network means ORCID records accumulate trustworthiness over time



Validated **Trust Markers** added to records by **our member organizations** allows researchers to **demonstrate their scholarly bona fides**



Collecting **authenticated ORCID IDs** gives **confidence** that the record holder has **authority over their record**



ORCID has made it easier to find trust markers

ORCID records can be complex and time consuming for editors to assess.

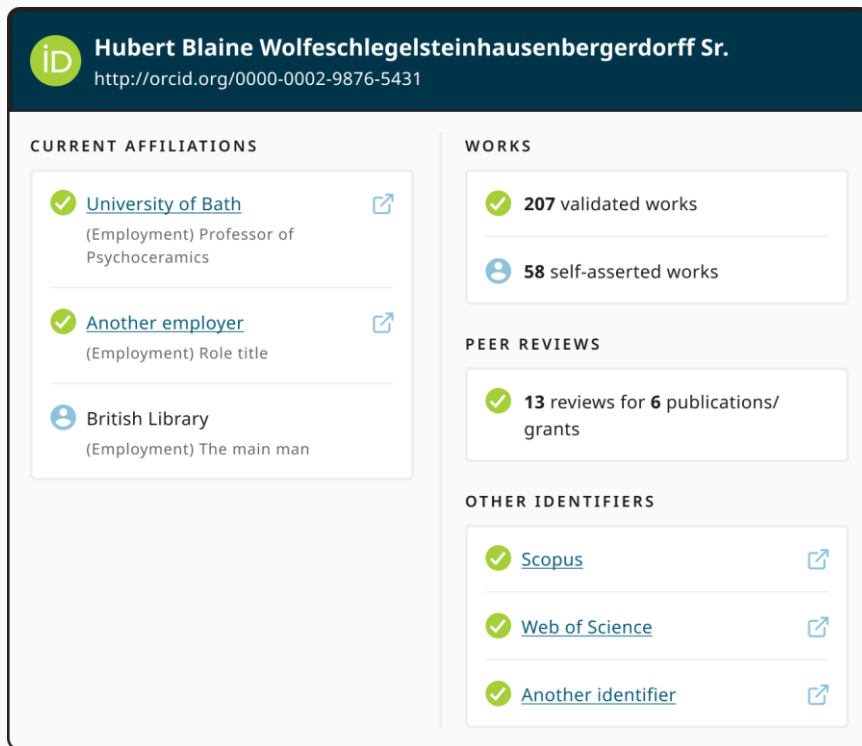
- Trust markers can be found throughout an ORCID record.
- Locating individual markers was tricky, especially on a large and detailed record.
- We've provided editors with a simple to understand summary of the record's 'trust markers' in context within their editorial system
- Making it easier to identify fraudulent and low quality submissions

The screenshot displays an ORCID iD record for Sofia Maria Hernandez Garcia. The record is organized into several sections, each with a green header bar and a list of items. Orange checkmarks are placed over various sections to indicate trust markers. The sections and their contents are as follows:

- Profile:** Includes the ORCID iD (0000-0001-5727-2427) and the URL <https://orcid.org/0000-0001-5727-2427>.
- Emails:** Lists s.garcia@orcid.org.
- Websites & social links:** Lists the Faculty profile webpage.
- Other IDs:** Lists the Profile system identifier (A-123456), ResearcherID (L-8716-2018), and eScientist (0000-0001-5727-2427).
- Countries:** Lists the United States.
- Biography:** States that Sofia Maria Hernandez Garcia is used for testing and demonstrating ORCID records.
- Activities:** A list of activities with counts and sort options:
 - Employment (2):** 2 items, Sort.
 - Education and qualifications (4):** 4 items, Sort.
 - Invited positions and distinctions (3):** 3 items, Sort.
 - Membership and service (2):** 2 items, Sort.
 - Funding (1):** 1 item, Sort.
 - Research resources (2):** 2 items, Sort.
 - Works (7):** 7 items, Sort.
 - Peer review (2):** 2 items, Sort.

The record was last modified on Sep 30, 2022, at 12:38:28 PM UTC.

Record Summaries can be integrated into various workflows



The screenshot displays an ORCID record summary for Hubert Blaine Wolfeschlegelsteinhausenbergerdorff Sr. The header includes the iD logo, the name, and the ORCID URL: <http://orcid.org/0000-0002-9876-5431>.

CURRENT AFFILIATIONS

- ✓ [University of Bath](#) (Employment) Professor of Psychoceramics
- ✓ [Another employer](#) (Employment) Role title
- [British Library](#) (Employment) The main man

WORKS

- ✓ 207 validated works
- 58 self-asserted works

PEER REVIEWS

- ✓ 13 reviews for 6 publications/grants

OTHER IDENTIFIERS

- ✓ [Scopus](#)
- ✓ [Web of Science](#)
- ✓ [Another identifier](#)

A **Record Summary** provides an easy way to visualize **trust markers** and better understand the contents of an ORCID record

- They can be displayed directly within editorial systems and link to the full record
- ... and pulled from our APIs and reused in other tools and workflows

The Record Summary is also available directly from ORCID records

- Researchers can access a summary view of their own records, and see others' Record Summaries
- It contains the same information as the one embedded in the editorial workflow

Tom Demeranville

Tom Demeranville; The guy from ORCID with the colourful shirt



<https://orcid.org/0000-0003-0902-4386>



Hide record summary

Record summary

[Find out more about record summaries](#)

AFFILIATIONS



2018-01-01 to present
Director of Product
employment



2015-06-10 to 2017-12-31
Technology Advocate
employment



2013-02 to 2014-12
Technical Lead
employment

[+ 1 more Affiliation](#)

KEY DATES

Record created
Jan 18, 2013

Last updated
Apr 4, 2024

WORKS

7 Self-asserted works

31 Validated works

FUNDING

2 Self-asserted fundings

PROFESSIONAL ACTIVITIES

Max-Delbrück-Centrum für Molekulare Medizin
in der Helmholtz-Gemeinschaft
2021 to 2022
Grant Reviewer
service

LAUNCHED LAST MONTH!

Personal information

Emails

t.demeranville@orcid.org

Websites & social links

nowhere in particular

Keywords

awesome

Biography

ORCID Product Director. A technical background in innovation, software engineering and identity management.

Activities

Collapse all

Employment (4)

Sort

ORCID: Bethesda, US

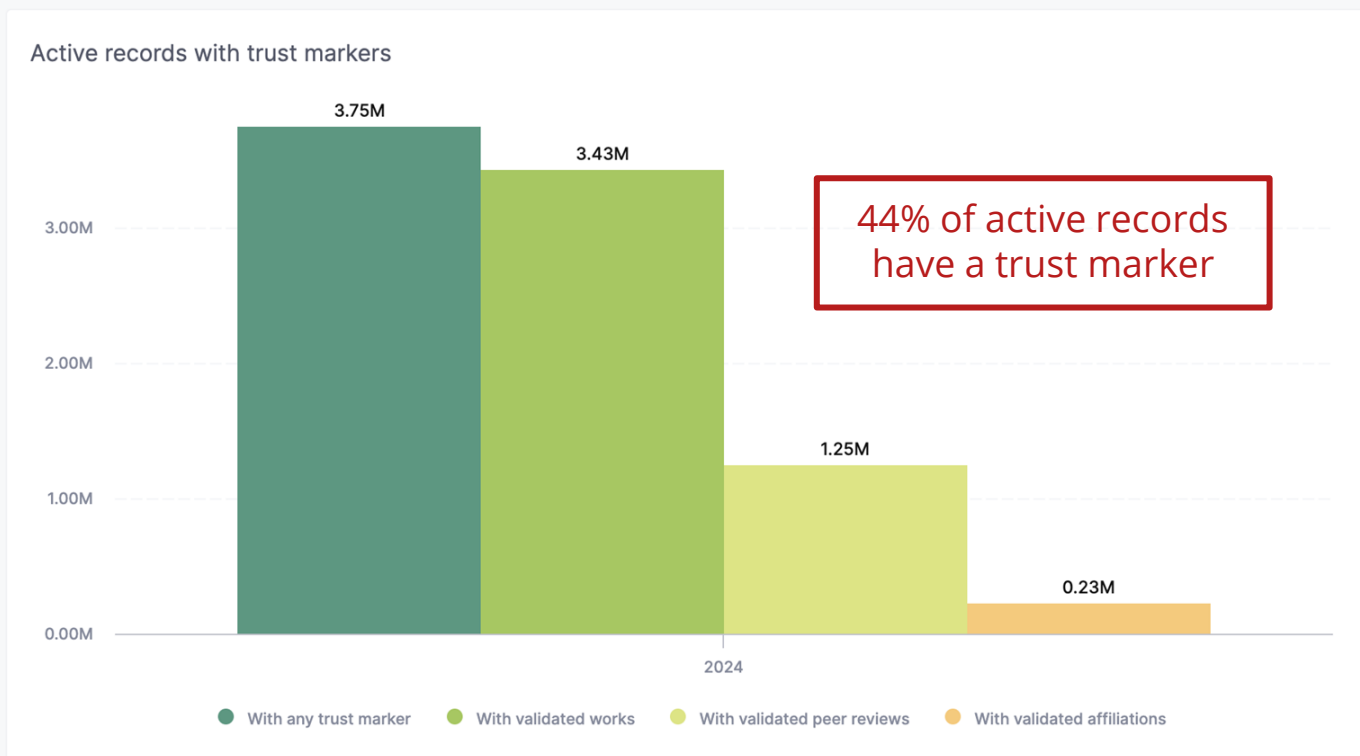
2018-01-01 to present | Director of Product (Product)
Employment

[Show more detail](#)

Source: ORCID via ORCID Member Portal



Trust markers are more common than you think



It takes action from the whole community to build trust

Publishers

Many publishers mandate collecting ORCID iDs, and most manuscript systems can collect ORCID iDs, but coverage can be patchy as not all editors have switched this option on.

Collect during submission

Institutions

Many institutions invest heavily in keeping their CRIS/ERA systems up to date, and have systems that can automatically update ORCID records but not all institutions have enabled the ORCID functionality in these systems.

Turn on synchronization

ORCID

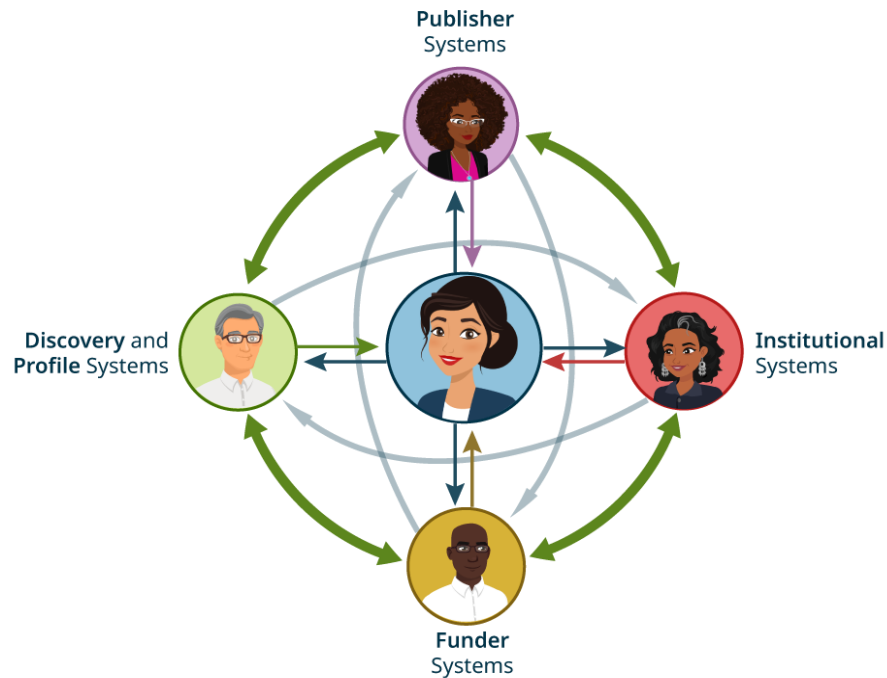
There are 2.25m active ORCID records that we can match with ORCID members based on their email address — can we connect them up?

Enable the connections

ORCID's Members form our Community Trust Network

Think of ORCID as a *hub* of research-related data that gets propagated throughout scholarly systems

The more **fully-populated ORCID records** and integrated systems there are, the more value that all stakeholders can gain from adopting ORCID.



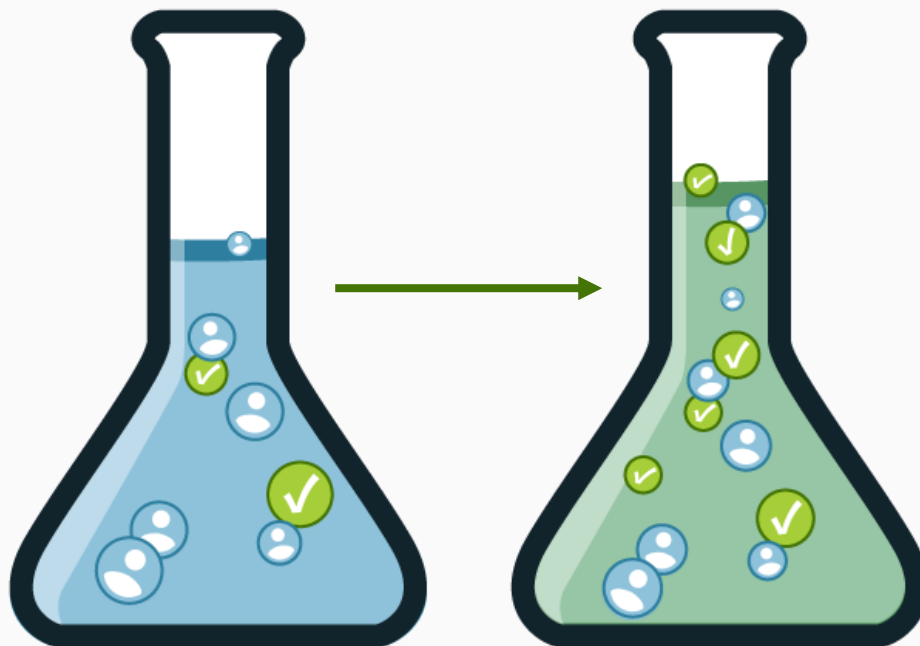
Propagating trust markers throughout the research ecosystem can have a positive effect on research integrity



▼ Review activity for British journal of Cancer (1)				
Journal, British journal of Cancer ISSN: 1532-1827				
Review date: 2020-11-16	Type: Review	Role: Reviewer	Show more detail	View
Source: Nature Publishing Group				

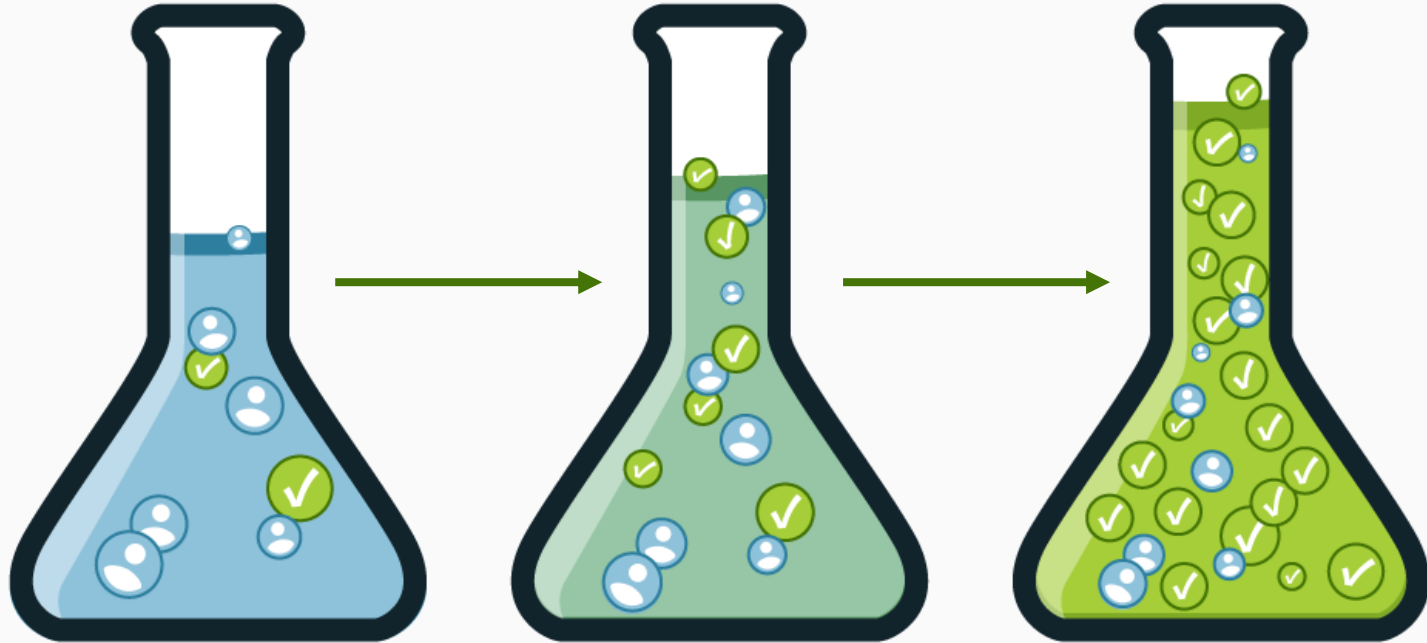
Grant for ORCID	
2014 to present Grant Wellcome Trust (London, GB)	Show more detail
Source:  Sofia Maria Hernandez Garcia	

More Trust Markers = More Trustworthiness

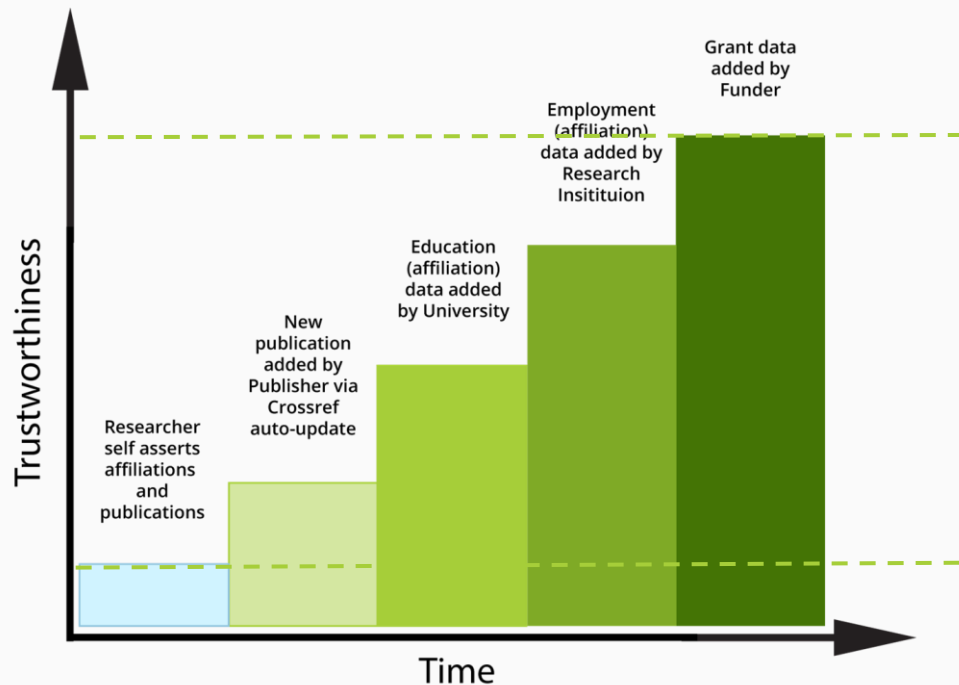


WORKS
✓ 3 Validated works
4 Self-asserted works
PEER REVIEWS
✓ 2 reviews for 2 publications/grants
FUNDING
1 Self-asserted funding

As more ORCID members add data (and trust markers) to records, the more robust the entire scholarly record becomes



Each source of data has its own mechanisms to ensure trustworthiness



- Can only be added by ORCID member organizations
- Subject to membership agreement terms
- Added via authenticated API
- Data can be retracted by member



- Collected via authenticated workflows
- Community-monitored
- Subject to dispute procedure
- Record can be locked if not corrected



ORCID's community trust network spans the globe

Users in 250 countries

Almost every country on the planet!



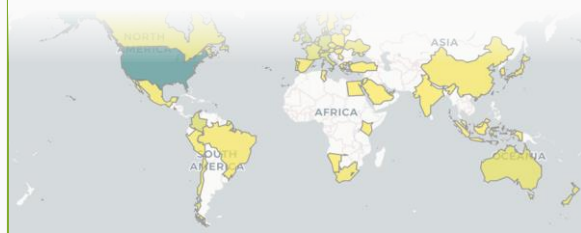
2023

1.62B
items

of data in ORCID
records was reused
by external systems

Member organizations in 58 countries

27 national consortia and 1 regional
consortium



Yearly Active Researchers

8.4 Million

Active Integrated Systems

5,693

Organizational Members

1,392



Data collected on 20 May 2024

More data available at <https://info.orcid.org/orcid-statistics/>



Each of our stakeholder groups has a role to play in our community trust network

Researchers
and other
contributors

Policy
makers
and
government

Publishers,
associations
and
conferences

Funders
and
Facilities

Universities
and
research
institutions

Services
and
Vendors

Publishers add a lot of validated works and peer review trust markers

In Vitro Antimicrobial Studies of Mesoporous Silica Nanoparticles Comprising Anionic and Organic Salts

Pharmaceutics
2023-07-12 | Journal article
DOI: [10.3390/pharmaceutics15071934](https://doi.org/10.3390/pharmaceutics15071934)

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URL
<https://doi.org/10.3390/pharmaceutics15071934>

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Added
2023-07-13

Last modified
2023-07-13

Source:  Crossref  Preferred source (of 3)

Peer review (11 reviews for 5 publications/grants)

Sort

Review activity for Macromolecular materials and engineering. (4)

Journal, Macromolecular Materials and Engineering
ISSN: [1439-2054](#)

Review date: 2023 Type: review Role: reviewer

[Show more detail](#)

[View](#)

Source:  Editorial Manager Journals at Wiley

Review date: 2023 Type: review Role: reviewer

[Show more detail](#)

[View](#)

Source:  Web of Science Researcher Profile Sync

Review date: 2022 Type: review Role: reviewer

[Show more detail](#)

[View](#)

Source:  Web of Science Researcher Profile Sync

Review date: 2022 Type: review Role: reviewer

Source:  Editorial Manager Journals at Wiley

Decline of a distinct coral reef holobiont community under ocean acidification

Microbiome
2024 | Journal article
DOI: [10.1186/s40168-023-01683-y](https://doi.org/10.1186/s40168-023-01683-y)

[Show less detail](#)

Added
2024-05-15

Last modified
2024-05-15

Source:  Smithsonian Institution

Trust markers help publishers during the editorial process

- We're working with publishers (and vendors) to **ensure that authenticated ORCID IDs are collected for ALL** reviewers, editors and authors, including co-authors.
- We're working with institutions (and vendors) to **increase the quantity of validated affiliation data** in the registry.

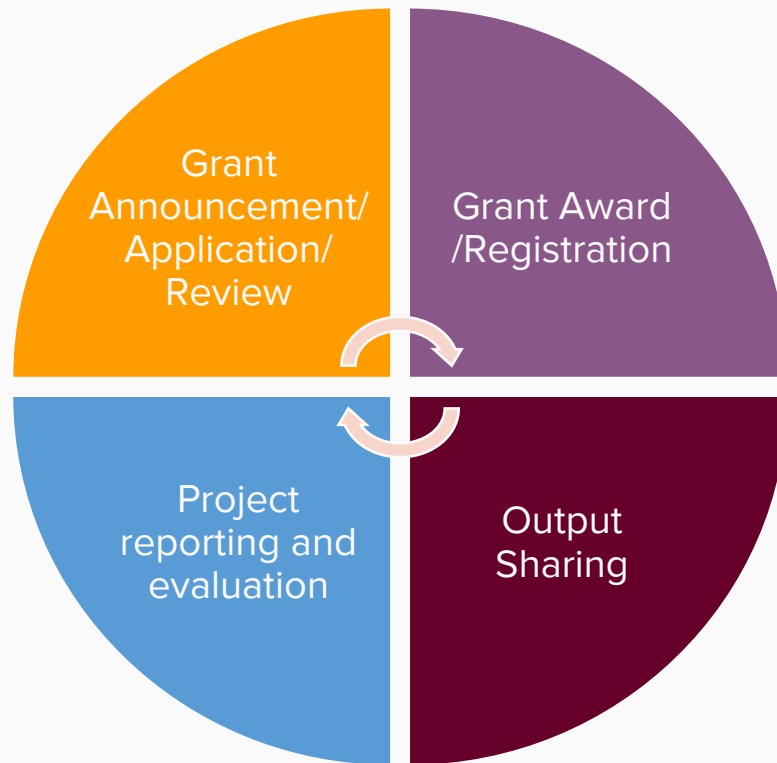
"It is clear that ORCID adoption is an important tool in combating paper mills. Requiring authors to register an ORCID and to associate their ID with the paper at the time of submission decreases reliance on fully automated disambiguation methodologies and strengthens our approach. Relatively low ORCID adoption rates are effectively keeping a low bar for paper-mill activity. The call for system wide change with regard to ORCID is not new, but it is certainly now more urgent.

Identifying Fabricated Networks within Authorship-for-Sale Enterprises, Simon J. Porter, Leslie D. McIntosh. [arXiv:2401.04022](https://arxiv.org/abs/2401.04022) [cs.DL].



Funders play an integral role in adding trust markers

We're working with funders and other persistent identifier providers to **PID-enable** the entire **funding workflow**



Government policy makers are influencing PID adoption by setting national policies and strategies

"Adoption of ORCID in Australia has already demonstrated the value of PIDs. Incentives estimates that by using ORCIDs to populate research grant applications, the Australian Research Council (ARC) has saved researchers up to 3 or 4 days per grant application."



Australian National Persistent Identifier (PID) Strategy and Roadmap¹

"Recommendation 1: Implement ORCID iD for researchers into grant application, peer review, and project reporting workflows:



Netherlands: NWO Persistent Identifier Strategy²

"Encourage the full use of ORCID-ID for each researcher, in its functionality of enabling and connect services, including those related to citations"



Italy: National Open Science Plan³

As a matter of principle we: 1. Strongly encourage the use of ORCID iD across the research and science system 2. Commit to support the use of ORCID iD as a common researcher identifier across New Zealand's research and science system.



Joint Statement of Principle: Adoption and use of ORCID identifiers in New Zealand⁴

"metadata should include at minimum: all author and co-author names, affiliations, and sources of funding, referencing digital persistent identifiers, as appropriate"



USA: "Nelson" Public Access Memo⁵

"... funding agencies shall establish policies regarding requirements for individual researchers supported by or working on any Federal research grant to be registered with a service that provides a digital persistent identifier for that individual."



USA: NSPM-33⁶
Presidential Memorandum on United States Government-Supported Research and Development National Security Policy²

¹ Australian Research Data Commons <https://zenodo.org/doi/10.5281/zenodo.10656275>

² NWO Persistent Identifier Strategy, <https://zenodo.org/doi/10.5281/zenodo.4674512>

³ Translated from: https://www.mur.gov.it/sites/default/files/2022-06/Piano_Nazionale_per_la_Scienza_Aperta.pdf

⁴ Joint statement by The Health Research Council of New Zealand, the Independent Research Association of New Zealand, the Ministry of Business, Innovation and Employment, the Ministry of Education, the Ministry for Primary Industries, the New Zealand Association of Scientists, the Royal Society of New Zealand, Science New Zealand, the Tertiary Education

⁵ Section 4(a)(i): <https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-access-Memo.pdf>

⁶ Section 4(b)(v): <https://trumpwhitehouse.archives.gov/presidential-actions/presidential-memorandum-united-states-government-supported-research-development-national-security-policy/>

We're enabling vendors to make it easier for members to expedite the contribution of trusted data

Specific best-practice ORCID certification criteria for 5 scholarly workflows:

1. Manuscript Submission Systems



2. Research Information Systems



3. Grant/Facility Application Management Systems



4. Repository Systems

5. Discovery Systems (New)

Benefits to organizations using a CSP

- Out-of-the-box, best-in-class ORCID-related functionality
- No need for custom technical development
- A more consistent user experience
- Training and support support from the vendor

Benefits for vendors offering CSPs

- Enhanced Promotion from ORCID:
 - Listing on our website
 - Recommendation to members
 - ORCID CSP Badge
 - Certification letter for proposals/tenders
- Enhanced Support from ORCID
- Advanced reporting



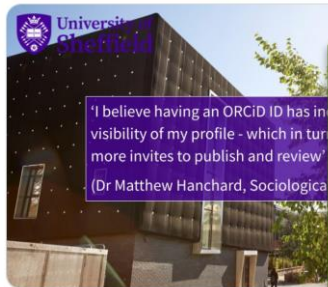
<https://info.orcid.org/vendors-and-service-providers/become-an-orcid-certified-service-provider/>



Trust Markers in action: Use Cases from our Community

Researchers love ORCID and want to use it everywhere!

Open Research TUoS @OpenResShef · 6h
Here's a quick take from one of our researchers on the benefits of ORCID IDs:
Register for yours here: orcid.org



Kristin @kricketchirps · May 5
In the course of resubmitting this manuscript, the corresponding author and I both had to work with the journal to restore access/consolidate digital entities.

Dr. Ed Emmott @edemmott · Apr 29
Replying to @astacus and @ORCID_Org
Yep. Last submission I had to manually include full affiliations and emails for every author on initial submission. Took nearly an hour...

Madhu Pai, MD, PhD @paimadhu · Mar 29
Hey publishers & editors,

Do you want to help prevent burnout & stress among scientists?

Just allow us to log into ALL journals with one single ID (e.g. [@ORCID_Org](https://orcid.org))!

Signed

All researchers/authors

Publication Facts

For this journal	Other journals
Publisher: Ubiquity Press	
Editorial team: 65% profiles	
Articles accepted: 8%	13% accepted
Indexed: GS M WS S	3.4 indexes
For this article	Other articles
Peer reviewers: 2	2.4 average
Competing interests: Yes	11% yes
Data availability: Yes	16% yes
Funders: DAE NIH NSF	32% have funders

To learn more about a fact, click [icon]

Researchers - if I can work out your @ORCID_Org I can assist in improving your #CitationMetrics. I haven't provided ORCID with enough info so I can't link your papers via @ORCID_Org. I've collected specimens via @WDScholar and generate a @WDScholar p...

Open Science @OSNU
Check out

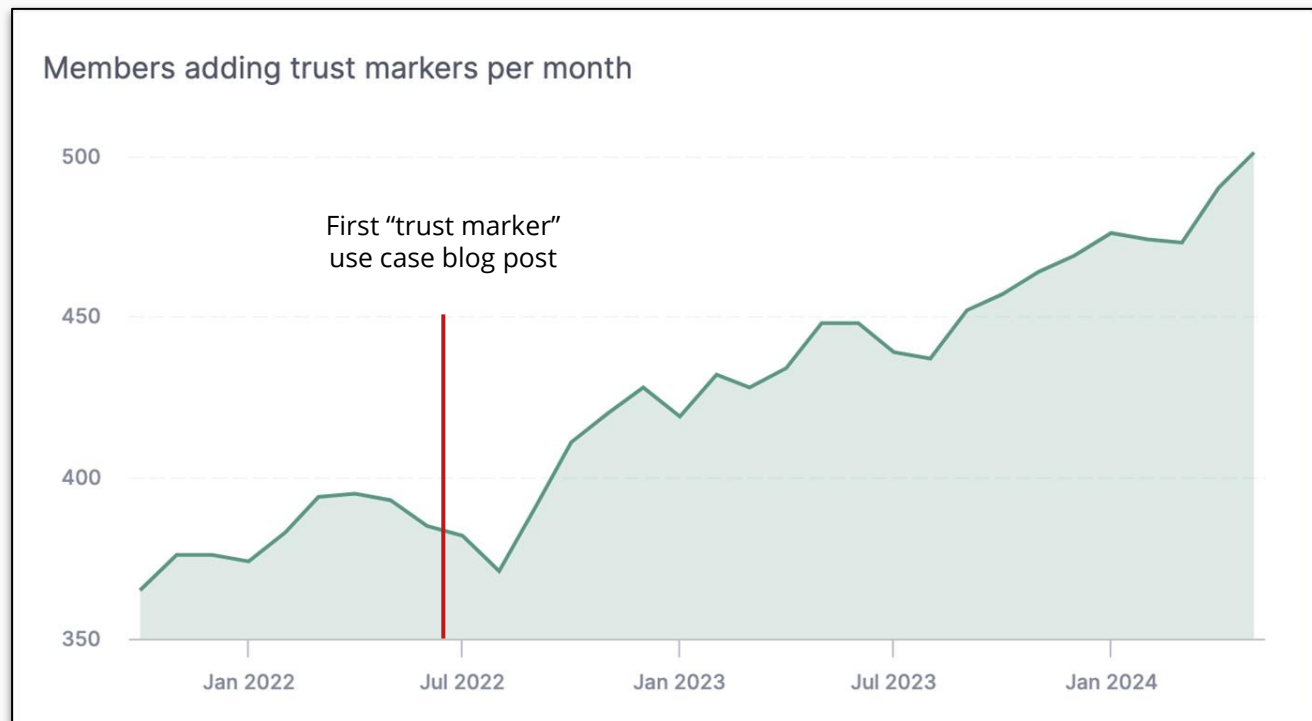
- 46 Member organizations
- 36 completed integrations
- 4000 Affiliation items added via the Affiliation Manager
- #DSpace and #OJS are predominant



cyanobacteria @cyanobacteria · Jun 1
from 1946 to 2021. And it's a mess... First learning, if you have an @ORCID_Org ID please always use it. If you don't have one, get one. Now! 😊

Marcus Munafò @MarcusMunafò · Jun 3
IMO the single most compelling reason to have an @ORCID_Org identifier is to be able to log in to manuscript submission websites without the usual password waltz... Well done whoever came up with that functionality!

**ORCID
member
organizations
are adding
more trust
markers all
the time!**



Member Name	Items Added
Crossref	19,117,192
Clarivate	6,543,547
MDPI - Multidisciplinary Digital Publishing Institute	3,688,404
Fundação para a Ciência e a Tecnologia	3,110,903
Springer Nature Ltd.	2,378,333
Elsevier, Inc.	2,061,303
CERN European Organization for Nuclear Research	1,850,348
American Chemical Society (ACS)	1,401,163
King's College London	872,453
Smithsonian Astrophysical Observatory	828,156
University College London - UCL	592,672
University of Southampton	517,967
Northumbria University	511,101
KU Leuven	375,380
Imperial College London	338,339
Wiley	328,447
Montanuniversität Leoben	311,434
National Information Processing Institute	286,744
University of Helsinki	272,952
Aarhus University Library	249,381

Our top twenty integrations have contributed 46 million trust markers!

Trust markers can help researchers access highly protected medical research data more quickly

"...since ORCID enables a collection of research activities in one place, reviews are much more efficient for applicants who have linked their ORCID iD."

- Brian Gow, Tom Pollard,

PhysioNet

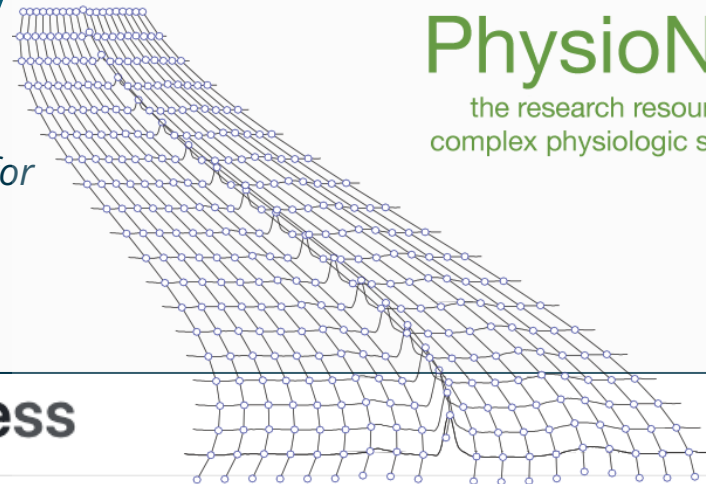
PhysioNet

the research resource for
complex physiologic signals

Application for Credentialed Access

Please use the form below to apply for DataShare credentialing. In order to apply:

- Complete the CITI Program in "Data or Specimens Only Research", an online course that covers ethics of human research and patient privacy. Instructions are provided [here](#).
- If you have an ORCID iD please link to it in your settings ([ORCID settings](#)) as this may help us expedite your application by making it easier to verify your identity.

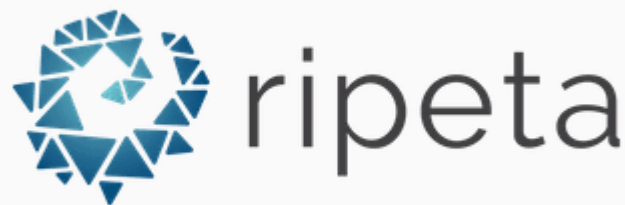


Trust markers help Ripeta assess the quality of reporting and the robustness of authors and the scientific method

“...As part of its services, Ripeta is able to check an author’s history for any potential research integrity flags. To do so, it uses trust markers related to ORCID.”

- Simon Linacre,

Ripeta



Elevating trust and integrity in research takes all of us

Restoring trust in the scholarly record is a **multifaceted process.**

ORCID and our **peer PID** and infrastructure providers have a **critical role to play.**

It is **everyone's responsibility** to commit to solutions (& **contribute trusted data!**)



We're glad you joined us!

Chris Shillum
Executive Director



<https://orcid.org/0000-0002-1108-3660>

Tom Demeranville
Director of Product



<https://orcid.org/0000-0003-0902-4386>

Julie Petro
Director of Communications



<https://orcid.org/0000-0003-4967-747X>



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